Application No.: 09/893,971 Docket No.: 8733.480.00-US

Amendment dated September 16, 2004 Reply to Office Action dated June 17, 2004

## **Listing of the Claims:**

1. (Currently Amended) A method for fabricating a liquid crystal display (LCD), comprising:

forming a first substrate and a second substrate;

forming patterned spacers on the first substrate;

forming oriented films on the first substrate and on the second substrate;

disposing the first substrate and the second substrate in a facing relationship

wherein the oriented films on the first substrate and on the second substrate contact each other;

radiating light on the oriented films on the first substrate and on the second substrate to orient and bond the oriented films [[and to bond]] to each other, whereby the first substrate and the second substrate are bonded together; and

interposing a liquid crystal between the first substrate and the second substrate.

- 2. (Original) The method of claim 1, wherein the liquid crystal is a smectic liquid crystal.
- 3. (Cancelled)
- 4. (Previously Presented) The method of claim 1, wherein the radiated light is linearly polarized light.
- 5. (Previously Presented) The method of claim 1, wherein the radiated light is elliptically polarized light.
- 6. (Previously Presented) The method of claim 1, wherein the radiated light is UV light.
- 7. (Previously Presented) The method of claim 1, wherein the bond of the substrates includes pressing the first substrate and the second substrate together.
- 8. (Original) The method of claim 1, wherein forming a first substrate includes: forming a plurality of crossing gate lines and data lines on the first substrate; forming thin film transistors at each crossing; and forming pixel electrodes that electrically connect to the thin film transistors.

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9. (Original) The method of claim 1, wherein the patterned spacers are formed between the pixel electrodes.

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- 10. (Currently Amended) A method for fabricating an LCD, comprising:
  - forming a first substrate and a second substrate;

forming a first oriented film on the first substrate and a second oriented film on the second substrate;

locating spacers on the first substrate;

disposing the first substrate and the second substrate in a facing relationship such that the spacers form a gap between the first substrate and the second substrate;

radiating light on the first oriented film and on the second oriented film to orient <u>and</u>

<u>bond</u> the first and second <u>oriented</u> films [[and to bond]] <u>to each other, whereby</u> the first substrate

and the second substrate <u>are bonded</u> together; and

interposing a liquid crystal between the first substrate and the second substrate.

- 11. (Original) The method of claim 10, wherein the spacers include photo cross-linkable adhesive spacers and ball spacers.
- 12. (Original) The method of claim 10, wherein the liquid crystal is a smectic liquid crystal.
- 13. (Previously Presented) The method of claim 10, wherein the first substrate and the second substrate are pressed together during the radiating light.
- 14. (Previously Presented) The method of claim 10, wherein the radiating light is lineally polarized light or elliptically polarized light.
- 15. (Currently Amended) A method for fabricating a liquid crystal display, comprising:

  forming a first substrate and a second substrate;

  forming oriented films on the first substrate and on the second substrate;

  disposing the first substrate and the second substrate in a facing relationship;

  radiating light on the oriented films to orient and bond the oriented films [[and to bond]]

  to each other, whereby the first substrate and the second substrate are bonded together; and interposing a liquid crystal between the first substrate and the second substrate.

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16. (Original) The method of claim 15, further including locating spacers on the first substrate.

- 17. (Original) The method of claim 16, wherein the spacers are located by depositing and then patterning a spacer material.
- 18. (Original) The method of claim 16, wherein the spacers are located by dispersing photo cross-linkable adhesive spacers on the first substrate.
- 19. (Currently Amended) The method of claim 18, wherein [[ball]] the spacers are located by dispersing ball spacers on the first substrate between the photo cross-linkable adhesive spacers.
- 20. (Previously Presented) The method of claim 15, wherein the radiating light is performed using linearly polarized light.
- 21. (Previously Presented) The method of claim 15, wherein the radiating light is performed using elliptically polarized light.
- 22. (Currently Amended) A liquid crystal display, comprising:
  - a first substrate having patterned spacers;
- a first oriented film, comprised of a light reactive material, over the first substrate and over its patterned spacers, wherein the first oriented film forms a first alignment film;
  - a second substrate;
- a second oriented film, comprised of a light reactive material, over the second substrate, wherein the second oriented film forms a second alignment film; and
  - a liquid crystal,

wherein the first substrate and the second substrate are configured in a facing relationship such that the first alignment film on the patterned spacers contacts the second alignment film, wherein a radiating light on the contacting alignment films orients and bonds the first and second alignment films to each other, whereby [[and bonds]] the first substrate and the second substrate are bonded together, wherein a gap exists between portions of the first substrate and portions of the second substrate, and wherein the liquid crystal is disposed in the gap.

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23. (Original) The liquid crystal display of claim 22 wherein the liquid crystal is a smectic liquid crystal.

- 24. (Previously Presented) The liquid crystal display of claim 22, wherein the light reactive materials of the first substrate and the second substrate react to linearly polarized light.
- (Previously Presented) The liquid crystal display of claim 22, wherein the light reactive 25. materials of the first substrate and the second substrate react to elliptically polarized light.
- 26. (Previously Presented) The liquid crystal display of claim 22, wherein the light reactive materials of the first substrate and the second substrate react to UV light.
- 27. (Original) The liquid crystal display of claim 22, wherein the light reactive materials on the first substrate and on the second substrate are selected from a group consisting of materials with a polyvinylcinnamate lineage, a polyazobenzene lineage, a cellulosecinnamate lineage and a photosensitive polyimide lineage.
- 28. (Previously Presented) The liquid crystal display of claim 22, wherein the patterned spacers are located between pixel electrodes.
- 29. (Currently Amended) A liquid crystal display, comprising:
  - a first substrate;
- a first oriented film, comprised of a light reactive material, over the first substrate, wherein the first oriented film forms a first alignment film;
  - a plurality of spacers on the first substrate;
- a second substrate configured over the plurality of spacers such that the second substrate is disposed away from the first substrate;
- a second oriented film, comprised of a light reactive material, on the second substrate and disposed between the first substrate and the second substrate and in contact with the plurality of spacers, wherein the second oriented film forms a second alignment film; and
  - a liquid crystal between the first substrate and the second substrate,

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wherein the first alignment film contacts the second alignment film such that a radiating light on the contacting films orients and bonds the first and second alignment films to each other, whereby [[and bonds]] the first substrate and second substrate are bonded together.

- 30. (Previously Presented) The liquid crystal display of claim 29, wherein the plurality of spacers include photo cross-linkable adhesive spacers that bond the first substrate to the second substrate.
- 31. (Previously Presented) The liquid crystal display of claim 29, wherein the plurality of spacers include ball spacers.
- 32. (Original) The method of claim 29, wherein the liquid crystal is a smectic liquid crystal.
- 33. (Previously Presented) The liquid crystal display of claim 29, wherein the light reactive materials of the first substrate and the second substrate react to linearly polarized light.
- 34. (Previously Presented) The liquid crystal display of claim 29, wherein the light reactive materials of the first substrate and the second substrate react to elliptically polarized light.
- 35. (Previously Presented) The liquid crystal display of claim 29, wherein the light reactive materials of the first substrate and the second substrate react to UV light.
- 36. (Previously Presented) The liquid crystal display of claim 29, wherein the light reactive materials of the first substrate and the second substrate are selected from a group consisting of materials with a polyvinylcinnamate lineage, a polyazobenzene lineage, a cellulosecinnamate lineage and a photosensitive polyimide lineage.